

We Claim:

1. An optical device assembly, comprising:

an optical device having an area;

an optical fiber led from said optical device through said area; and

an anti-kink protector for said optical fiber being disposed in said area and made of an electrically conductive material.

2. The assembly according to claim 1, including a metallic structure belonging to said device and electrically contacting said electrically conductive material.

3. The assembly according to claim 2, including a metallic housing of said device accommodating an opto-electronic component said metallic housing being electrically coupled to said anti-kink protector.

4. The assembly according to claim 3, wherein said opto-electronic component is a TO housing.

5. The assembly according to claim 1, wherein said anti-kink protector electrically contacts a reference potential.

6. The assembly according to claim 5, including a metallic housing coupled to said anti-kink protector.

7. The assembly according to claim 6, wherein said metallic housing is a module housing and surrounds said device.

8. The assembly according to claim 7, wherein:

said metallic housing has an opening formed therein; and

said anti-kink protector has circumferential grooves for fixing said anti-kink protector to said opening of said metallic housing.

9. The assembly according to claim 1, wherein said anti-kink protector has a tapering area; and

an electrically conductive sleeve sheathes said anti-kink protector at least in said tapering area.

10. The assembly according to claim 1, wherein said electrically conductive material is highly conductive.

11. The assembly according to claim 1, wherein:

said optical device is an optical connector; and

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said anti-kink protector absorbs electromagnetic waves strongly.

12. An optical device assembly, comprising:

an optical device having an area;

an optical fiber led from said optical device through said area; and

an anti-kink protector for said optical fiber being disposed in said area and made of a material being highly absorbent to electromagnetic waves.

13. The assembly according to claim 12, including a metallic housing of said device accommodating an opto-electronic component and coupling electrically to said anti-kink protector.

14. The assembly according to claim 12, wherein said opto-electronic component is a TO housing.

15. The assembly according to claim 12, wherein said anti-kink protector electrically contacts a reference potential.

16. The device according to claim 15, including a metallic housing coupled to said anti-kink protector.

17. The assembly according to claim 16, wherein said metallic housing is a module housing and surrounds said device.

18. The assembly according to claim 16, wherein:

said metallic housing has an opening formed therein; and

said anti-kink protector has circumferential grooves for fixing said anti-kink protector to said opening of said metallic housing.

19. The assembly according to claim 12, wherein said anti-kink protector has a tapering area; and

an electrically conductive sleeve sheathes said anti-kink protector at least in said tapering area.

20. The assembly according to claim 17, wherein said conductive sleeve completely sheathes said anti-kink protector.

21. The assembly according to claim 12, wherein said electrically conductive material is highly conductive.

22. The assembly according to claim 12, wherein said material being highly absorbent to electromagnetic waves is a ferritic material.

23 ~~22~~. The assembly according to claim 12, wherein:

said optical device is an optical connector; and

said material being highly absorbent to electromagnetic waves
absorbs electromagnetic waves strongly.

24 ~~23~~. An optical device assembly, comprising:

an optical device having an area;

an optical fiber led from said optical device through said
area; and

an anti-kink protector for said optical fiber being disposed
in said area and sheathed with an electrically conductive
material.

25 ~~24~~. The assembly according to claim 23, including a metallic
structure belonging to said device and electrically contacting
said electrically conductive material.

26 ~~25~~. The assembly according to claim 24, including a metallic
housing of said device accommodating an opto-electronic
component, said housing being electrically coupled to said
anti-kink protector.

25 ~~26~~. The assembly according to claim 25, wherein said opto-electronic component is a TO housing.

26 ~~27~~. The assembly according to claim 23, wherein said electrically conductive material electrically contacts a reference potential.

27 ~~28~~. The assembly according to claim 27, wherein said anti-kink protector is electrically coupled to a metallic housing.

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28 ~~29~~. The assembly according to claim 28, wherein said metallic housing is a module housing surrounding said device.

29 ~~30~~. The device according to claim 28, wherein:

said metallic housing has an opening formed therein; and

said anti-kink protector has circumferential grooves formed therein for fixing said anti-kink protector to said opening of said metallic housing.

30 ~~31~~. The assembly according to claim 27, wherein said sheathing is electrically coupled to a metallic housing.

31 ~~32~~. The assembly according to claim 31, wherein said metallic housing is a module housing surrounding said device.

32 33. The assembly according to claim 31, wherein:

said metallic housing has an opening formed therein; and

said sheathing has circumferential grooves formed therein for fixing said anti-kink protector to said opening of said metallic housing.

33 34. The assembly according to claim 23, wherein:

said anti-kink protector has a tapering area; and

said sheathing sheathes said anti-kink protector at least in said tapering area.

34 35. The assembly according to claim 34, wherein said sheathing sheaths said anti-kink protector completely.

35 36. The assembly according to claim 23, wherein said anti-kink protector is made of an electrically conductive material.

36 37. The assembly according to claim 23, wherein said electrically conductive material is highly conductive.

37 38. The assembly according to claim 23, wherein:

said optical device is an optical connector, and

said anti-kink protector is formed by a material strongly absorbing electromagnetic waves.

38/39. An optical device assembly, comprising:

an optical device having an area;

an optical fiber led out of said optical device through said area; and

an anti-kink protector for said optical fiber being disposed in said area and sheathed with a sleeve being made of a material being highly absorbent to electromagnetic waves.

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40/41. The assembly according to claim 39, including a metallic housing of said device accommodating an opto-electronic component, said metallic housing being electrically coupled to said anti-kink protector.

40/41. The assembly according to claim 40, wherein said opto-electronic component is a TO housing.

41/42. The assembly according to claim 39, including a metallic housing of said device accommodating an opto-electronic component, said metallic housing being electrically coupled to said sheathing.

42 ~~43~~. The assembly according to claim 42, wherein said opt-electronic component is a TO housing.

43 ~~44~~. The assembly according to claim 39, wherein:

said anti-kink protector is made of an electrically conductive material; and

said anti-kin protector and said sleeve electrically contacts a reference potential.

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44 ~~45~~. The assembly according to claim 44, including a metallic housing surrounding said device, said metallic housing being electrically coupled to said anti-kink protector.

45 ~~46~~. The assembly according to claim 45, wherein said metallic housing is a module housing.

46 ~~47~~. The assembly according to claim 45, wherein:

said metallic housing has an opening formed therein; and

said anti-kink protector has circumferential grooves formed therein for fixing said anti-kink protector to said opening of said metallic housing.

47 ~~48.~~ The assembly according to claim 44, including a metallic housing surrounding said device, said module housing being electrically coupled to said sleeve.

48 ~~49.~~ The assembly according to claim 48, wherein said metallic housing is a module housing.

49 ~~50.~~ The assembly according to claim 43, wherein:

said metallic housing has an opening formed therein; and

said sheathing has circumferential grooves formed therein for fixing said anti-kink protector to said opening of said metallic housing.

50 ~~51.~~ The assembly according to claim 44, wherein:

said anti-kink protector has a tapering area; and

said sleeve is made of and electrically conductive material and sheathes said anti-kink protector at least in said tapering area.

51 ~~52.~~ The assembly according to claim 51, wherein said sleeve completely covers said anti-kink protector.

53. The assembly according to claim 44, wherein said anti-kink protector and said sheathing are made of an electrically conductive material.
54. The assembly according to claim 53, wherein said electrically conductive material is highly conductive.
55. The assembly according to claim 44, wherein said material absorbing electromagnetic waves is ferritic.
56. The assembly according to claim 44, wherein:
- said optical device is an optical connector; and
- said anti-kink protector of said connector is formed by a material that absorbs electromagnetic waves strongly.
57. A module, comprising:
- a metallic module housing having an opening for passing optical fibers therethrough; and
- an optical device assembly including an optical device having an area, an optical fiber led from said optical device through said area, and an anti-kink protector for said optical fiber being disposed in said area and made of an electrically conductive material;

said anti-kink protector of said device being disposed in said opening of said module housing and coupled electrically to said module housing.

57 ~~58~~. The module according to claim 57, wherein said optical device is a transmitting device.

58 ~~59~~. The module according to claim 57, wherein said optical device is a receiving device.

59 ~~60~~. The module according to claim 57, wherein said anti-kink protector electrically couples said metallic structures of said device and said module housing.

60 ~~61~~. A module, comprising:

a metallic module housing having an opening for passing optical fibers therethrough; and

an optical device assembly including an optical device having an area, an optical fiber led from said optical device through said area, and an anti-kink protector for said optical fiber being disposed in said area and made of a material being highly absorbent to electromagnetic waves;

said anti-kink protector of said device being disposed in said opening of said module housing and coupled electrically to said module housing.

61 ~~62~~. The module according to claim 61, wherein said optical device is a transmitting device.

62 ~~63~~. The module according to claim 61, wherein said optical device is a receiving device.

63 ~~64~~. The module according to claim 61, wherein said anti-kink protector electrically couples said metallic structures of said device and said module housing.

64 ~~65~~. A module, comprising:

a metallic module housing having an opening for passing optical fibers therethrough; and

an optical device assembly including an optical device having an area, an optical fiber led from said optical device through said area, an anti-kink protector for said optical fiber being disposed in said area and sheathed with an electrically conductive material;

said anti-kink protector of said device being disposed in said opening of said module housing and coupled electrically to said module housing.

65. The module according to claim 65, wherein said optical device is a transmitting device.

66. The module according to claim 65, wherein said optical device is a receiving device.

67. The module according to claim 65, wherein said anti-kink protector electrically couples said metallic structures of said device and said module housing.

68. A module, comprising:

a metallic module housing having an opening for passing optical fibers therethrough; and

an optical device assembly including an optical device having an area, an optical fiber led out of said optical device through said area, and an anti-kink protector for said optical fiber being disposed in said area and sheathed with a sleeve being made of a material being highly absorbent to electromagnetic waves;

said anti-kink protector of said device being disposed in said opening of said module housing and coupled electrically to said module housing.

69 ~~70~~. The module according to claim 69, wherein said optical device is a transmitting device.

70 ~~71~~. The module according to claim 69, wherein said optical device is a receiving device.

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71 ~~72~~. The module according to claim 69, wherein said anti-kink protector electrically couples said metallic structures of said device and said module housing.